

**Gold King Mine Soil Analytical Results
Reclamation Areas**

Sample ID/Area Date Collected	GKM_Rec1	GKM_Rec2	GKM_Rec3	Misc
pH, SMP Buffer	4.6	5.5	5.1	NA
SMP Lime Requirement (tons/1000 tons)	17	11	13	NA
pH (saturated paste)	3.7	5.1	4.3	NA
Conductivity, Saturated Paste (mmhos/cm)	1.8	0.4	2.6	NA
Sodium Adsorption Ratio (SAR)	0.4	0.4	0.2	NA
Sulfur, Total	0.99	0.28	1.07	NA
Sulfur, Sulfate	0.08	0.05	0.25	NA
Sulfur, Pyritic	0.66	0.17	0.60	NA
Sulfur, Organic	0.24	0.06	0.22	NA
Neutralization Potential (t/kt)	2	5	4	NA
Acid Potential (t/kt)	31	8.9	33	NA
Acid/Base Potential (t/kt)	-29	-4	-29	NA
Acid Potential, Pyritic S (t/kt)	20	5.3	19	NA
Acid Base Potential, Pyritic S (t/kt)	-19	0	-15	NA
Total Organic Carbon (percent)	0.5	1.4	0.5	NA
Phosphorus, Olsen (mg/kg)	21	10	12	NA
NO ₃ as N (mg/kg)	<1	<1	<1	NA
Area (acres)	0.270	0.972	0.161	0.597
Lime Rate (t/kt) for	38	16	32	30*
Total Lime (tons) - 6" incorporation	8.1	12.2	4.1	14.1

Note: Lime rate calculated as SMP lime requirement + Acid Base Potential, Pyritic S + Neutralization Potential. The neutralization potential was added back in because the current soil pH was low so neutralization is likely not occurring. The lime requirement was calculated using specifications for Colorado Lime Company Rock Dust.

* Lime rate for miscellaneous areas was estimated using approximate average of the three analyses.